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Russ Woodroffe* (russw@math.wustl.edu), Department of Mathematics, Campus Box 1146,
One Brookings Drive, St. Louis, MO 63130. *Chordal clutters and k -decomposability.*

I'll present an extension of the definition of chordal from graphs to clutters (hypergraphs). The resulting family of clutters is a common generalization of chordal graphs, circuit clutters of matroids, and "acyclic" clutters. The independence complex of a chordal clutter is shellable, yielding a large family of simplicial complexes with every induced subcomplex shellable.

In order to prove shellability we extend the definition of k -decomposable to non-pure complexes. As in the pure case, this yields a hierarchy of shellable simplicial complexes. (Received August 08, 2010)